STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI -600086 (For candidates admitted from the academic year 2019-2020 and thereafter)

SUBJECT CODE: 19EC/AC/EM45

B.A. DEGREE EXAMINATION, MAY 2021 BRANCH IV – ECONOMICS END SEMESTER EXAMINATION

COURSE: ALLIED CORE MAX. MARKS: 50

PAPER: INTRODUCTORY ECONOMETRICS

TIME: 1 ½ HOURS

SECTION – A

 $(5 \times 2 = 10)$

ANSWER ANY FIVE OUT OF SIX QUESTIONS. (50 WORDS EACH)

- 1. Define econometrics.
- 2. What is the property of a mathematical model?
- 3. What are the assumptions of the stochastic disturbance term?
- 4. Specify and explain the SRF.
- 5. What is the significance of X being fixed in repeated sampling?
- 6. What is simultaneous equation bias?

SECTION - B

ANSWER ANY TWO OUT OF THREE QUESTIONS IN 400 WORDS $(2 \times 10 = 20)$

- 7. Derive the OLS estimators for a 2-varaible model. List the properties.
- 8. Discuss the assumptions underlying the Classical Linear Regression Model.
- 9. Explain the use of reciprocal model in estimating Phillips curve.

SECTION - C

ANSWER ANY ONE OUT OF TWO QUESTIONS IN 1000 WORDS $(1 \times 20 = 20)$

- 10. Prove that the OLS estimators of a two-variable linear regression model is BLUE.
- 11. Calculate a relevant equation for the following sample data:

Price of A: 50 70 78 89 110 120 Quantity A: 164 159 140 100 70 65

Estimate the average price elasticity of demand.

Is the model statistically significant?

